GOVERNMENT OF INDIA
WATER RESOURCES, RIVER DEVELOPMENT AND GANAGA REJUVENATION
LOK SABHA

UNSTARRED QUESTION NO:2533
ANSWERED ON:01.12.2016
Reduction in Rainfall
George Shri (Adv.) Joice

Will the Minister of WATER RESOURCES, RIVER DEVELOPMENT AND GANAGA REJUVENATION be pleased to state:

(a) whether the Government has recently noticed any reduction in rainfall across the country if so, the details thereof, State-wise;

(b) the measures taken by the Government to tackle the situation;

(c) whether the Government has any plan to collect and store rain water as far as possible, if so, the details thereof;

(d) whether any scheme for the purpose is in progress, if so, the details thereof; and

(e) the further steps to be taken towards rain water harvesting?

Answer

THE MINISTER OF STATE FOR WATER RESOURCES, RIVER DEVELOPMENT AND GANGA REJUVENATION

(DR. SANJEEV KUMAR BALYAN)

(a) Indian summer monsoon largely remained stable over the last century. Rainfall data from observational network of India Meteorological Department for the period 1901-2015 showed that the all-India annual and monsoon rainfall for the period 1901-2015 does not show any significant trend. However, there are statistically significant regional variations of precipitation. Eastern parts of Central India (Chhattisgarh, Eastern Madhya Pradesh, Bihar and Kerala) showed decreasing trend in monsoon rainfall, while west coast of India (North of Kerala) and interior parts of Karnataka and Maharashtra showed increasing trend in seasonal monsoon rainfall.

Central Water Commission (CWC) monitors live storage status of 91 reservoirs of the Country on weekly basis and issues weekly bulletin. As per reservoir storage bulletin dated 10.11.2016, in the northern region (Himachal Pradesh, Punjab and Rajasthan), the storage during current year is less than the corresponding period of last year and is also less than the average storage of last ten years during the corresponding period. In the reservoirs of Southern region (Andhra Pradesh, Telangana, Karnataka, Kerala and Tamil Nadu), storage is less than the average storage of last ten years during the corresponding period. State-wise details of water level of reservoirs in the country is at Annexure.

(b) to (e) Several measures have been taken up by the Central Government to tackle the situation :
â€¢ The National Water Policy (2012) formulated by Ministry of Water Resources, RD & GR, inter-alia, advocates conservation, promotion and protection of water and highlights the need for augmenting the availability of water through rain water harvesting, direct use of rainfall and other management measures. The National Water Policy (2012) has been forwarded to all State Governments/ UTs and concerned Ministries/ Departments of Central Government for adoption.
â€¢ This Ministry has circulated a Model Bill to all the States/UTs to enable them to enact suitable ground water legislation for its regulation and development which includes provision of rain water harvesting. So far, 15 States/UTs have adopted and implemented the ground water legislation on the lines of Model bill.
â€¢ CGWB has also prepared a conceptual document entitled "Master Plan for Artificial Recharge to Ground Water in India" during 2013. The Master Plan envisages construction of 1.11 crore rain water harvesting and artificial recharge structures in the Country at an estimated cost of Rs. 79,178 Crores to harness 85 BCM (Billion Cubic Metre) of water. The augmented ground water resources will enhance the availability of water for drinking, domestic, industrial and irrigation purpose. The Master Plan has been circulated to all State Governments for implementation.
â€¢ The Department of Rural Development has prioritized work related with Natural Resources Management (including water harvesting) under MGNREGA and has issued a joint framework with the Ministry of Water Resources and Department of Land Resources. For FY 2016-17, the States have taken up a target of 8,82,325 farm ponds.
â€¢ CGWB has taken up Aquifer Mapping and Management programme during XII Plan, under the scheme of Ground Water Management and Regulation. The Aquifer Mapping is aimed to delineate aquifer disposition and their characterization for preparation of aquifer/area specific ground water management plans with community participation.
â€¢ CGWB has been organizing mass awareness programmes in the Country to promote rain water harvesting and artificial recharge to ground water.
â€¢ Ministry of Urban Development has circulated its Model Building Bye-Laws (2016) to all State Governments which, inter-alia, incorporates provisions for Rain Water Harvesting. 30 States/UTs have made rain water harvesting mandatory by enacting laws or by formulating rules & regulations or by including provisions in Building bye-laws or through suitable Government Orders.
â€¢ Ministry of Environment, Forest and Climate Change have merged two separate programmes, namely, National Lake Conservation Plan (NLCP) and National Wetland Conservation Programme (NWCP) into a new Integrated Scheme of National Plan

for Conservation of Aquatic Eco-Systems (NPCA) for conservation and management of identified lakes and wetlands in the country.
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ANNEXURE

Annexure referred to Lok Sabha Unstarred Question No.2533 on "Reduction in Rainfall" for answer on 01.12.2016.

Water Level of 91 Reservoirs of India
(In 2nd Week of November 2014-2016)

S.NO	NAME OF RESERVOIR	STATE	Full Reservoir Level (FRL) (in Meters)	Water Level (in Meters)	
				13.11.2014	12.11.2015	10.11.2016
1	SRISAILAM	AP/TG	269.75	261.20	255.68	267.07
2	NAGARJUNA SAGAR	AP/TG	179.83	175.26	155.11	162.67
3	SOMASILA	A.P	100.58	95.57	88.60	94.27
4	SRIRAMSAGAR	TG	332.54	325.13	320.68	332.17
5	LOWER MANAIR	TG	280.42	272.17	269.05	279.70
6	TENUGHAT	JHAR	269.14	259.78	259.11	260.13
7	MAITHON	JHAR	146.30	145.30	140.79	148.53
8	PANCHET HILL	JHAR	124.97	123.14	121.31	127.32
9	KONAR	JHAR	425.81	425.62	423.46	425.78
10	TILAIYA	JHAR	368.81	369.44	368.01	370.46
11	UKAI	GUJ	105.16	101.80	100.83	103.90
12	SABARMATI(DHAROI)	GUJ	189.59	186.59	188.06	189.18
13	KADANA	GUJ	127.70	127.23	123.12	127.71
14	SHETRUNJI	GUJ	55.53	52.72	55.27	53.77
15	BHADAR	GUJ	107.89	104.61	106.32	101.53
16	DAMANAGANGA	GUJ	79.86	79.00	79.80	79.80
17	DANTIWADA	GUJ	184.10	171.34	181.46	175.09
18	PANAM	GUJ	127.41	126.55	123.15	125.85
19	SARDAR SAROVAR	GUJ	121.92	119.29	119.58	121.12
20	KARJAN	GUJ	115.25	112.60	108.08	109.32
21	GOBIND SAGAR(BHAKRA)	H.P	512.06	505.46	508.71	497.77
22	PONG DAM	H.P	423.67	412.15	417.84	413.64
23	KRISHNARAJA SAGRA	KAR	752.50	752.23	747.70	739.50
24	TUNGABHADRA	KAR	497.74	497.18	492.87	485.99
25	GHATAPRABHA	KAR	662.95	661.07	648.51	659.41
26	BHADRA	KAR	657.76	656.64	650.74	646.05
27	LINGANAMAKKI	KAR	554.43	552.66	546.58	546.98
28	NARAYANPUR	KAR	492.25	490.36	490.22	490.80
29	MALAPRABHA(RENUKA)	KAR	633.83	631.35	626.34	626.99
30	KABINI(Sancherla Tank)	KAR	696.16	694.64	691.64	690.62
31	HEMAVATHY	KAR	890.63	888.09	876.93	874.22
32	HARANGI	KAR	871.42	865.89	856.08	861.49
33	SUPA	KAR	564.00	555.46	540.83	546.15
34	VANIVILAS SAGAR	KAR	652.28	636.21	637.15	633.76
35	ALMATTI	KAR	519.60	518.13	512.66	517.88
36	GERUSOPPA	KAR	55.00	47.89	49.87	48.66
37	KALLADA(PARAPPAR)	KRL	115.82	115.50	109.70	100.42
38	IDAMALAYAR	KRL	169.00	165.48	151.65	154.30
39	IDUKKI	KRL	732.43	727.08	720.07	715.38
40	KAKKI	KRL	981.46	975.23	968.85	968.97
41	PERIYAR	KRL	867.41	868.09	864.95	859.19
42	MALAMPUZHA*	KRL	115.06	111.68	108.52	
43	GANDHI SAGAR	M.P.	399.90	397.06	399.08	399.77
44	TAWA	M.P.	355.40	354.24	354.03	354.70
45	BARGI	M.P.	422.76	422.20	421.15	421.70
46	BANSAGAR	M.P.	341.64	340.41	336.31	341.26
47	INDIRA SAGAR	M.P.	262.13	260.53	259.38	261.62
48	BARNA	M.P.	348.55	346.56	346.40	347.76
49	MINIMATA BANGOI	CHH.	359.66	357.87	349.68	354.98
50	MAHANADI	CHH.	348.70	348	343.77	348.69
51	JAYAKWADI(PAITHON)	MAH	463.91	459.15	456.73	462.77
52	KOYANA	MAH	657.90	656.46	650.47	657.56
53	BHIMA(UJJANI)	MAH	496.83	496.16	491.90	497.25
54	ISAPUR	MAH	441.00	437.96	433.18	435.27
55	MULA	MAH	552.30	549.83	544.75	552.08
56	YELDARI	MAH	461.77	457.43	451.71	454.61

57 GIRNA MAH 398.07 391.29 384.56 397.13
58 KHADAKVASLA MAH 582.47 581.56 579.73 581.13
59 UPPER VAITARNA MAH 603.50 601.92 600.20 603.40
60 UPPER TAPI MAH 214.00 214.00 214.00 214.00
61 PENCH (TOTALADOH) MAH 490.00 482.39 484.22 481.88
62 UPPER WARDHA MAH 342.50 341.63 341.50 342.30
63 BHATSA* MAH 142.07 133.80 139.74
64 DHOM* MAH 747.7 737.19 747.89
65 DUDHGANGA* MAH 646 639.54 645.56
66 MANIKDOH (KUKADI)* MAH 711.25 693.19 706.49
67 BHANDARDARA* MAH 744.91 735.67 744.66
68 HIRAKUD ODI 192.02 191.81 190.72 191.94
69 BALIMELA ODI 462.08 461.47 457.41 459.58
70 SALANADI ODI 82.30 72.20 57.80 70.96
71 RENGALI ODI 123.50 122.06 118.99 123.08
72 MACHKUND(JALPUT) ODI 838.16 837.86 837.41 837.19
73 UPPER KOLAB ODI 858.00 856.90 855.86 856.54
74 UPPER INDRAVATI ODI 642.00 640.41 634.85 639.02
75 THEIN PUN 527.91 510.18 508.69 512.11
76 MAHI BAJAJ SAGAR RAJ 280.75 280.75 279.70 281.45
77 JHAKAM RAJ 359.50 358.35 357.60 359.55
78 RANA PRATAP SAGAR RAJ 352.81 348.95 348.32 350.42
79 LOWER BHAWANI TN 278.89 273.12 268.12 261.83
80 METTUR(STANLEY) TN 240.79 235.13 227.63 216.91
81 VAIGAI TN 279.20 273.35 273.59 264.69
82 PARAMBIKULAM TN 556.26 555.80 550.55 543.36
83 ALIYAR TN 320.04 320.01 317.27 305.20
84 SHOLAYAR TN 1002.79 1002.73 985.86 962.16
85 GUMTI TRP 93.55 88.6 92.85 92.43
86 MATATILA UP 308.46 306.14 304.83 305.20
87 RIHAND UP 268.22 260.09 259.24 264.90
88 RAMGANGA UTT 365.30 361.10 354.08 350.92
89 TEHRI UTT 830.00 822.1 815.60 821.20
90 MAYURAKSHI WB 121.31 111.54 111.16 115.34
91 KANGSABATI WB 134.14 124.51 124.01 129.98
*CWC started monitoring the storage of the project from 2015 onwards.

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